Notebook, N-87-05-13

This notebook covers the period May-August 1887. It was used by H. De Coursey Hamilton for notes on filament experiments probably performed at the Edison Lamp Co. at Harrison, N.J. Also included is one page of notes regarding "Preparing Oiled Insulating paper for Armatures." Near the end of the book is a page containing the inscription: "the ordinary way"; the page immediately following has been removed. The spine is labeled "37." The pages are unnumbered. Only 8 pages have been used.

May 13, 18

-Hamilton's Eff. No 1-

Four carbon moulds ▽, each containing 6 bamboo filaments, bound together + sealed in a glass tube with enough boiled linseed in it to cover the moulds ▽. Tube is then placed in a sand bath + allowed to stay one hour while temperature is brought up from 75° to 600° F. Hot. Then taken out of sand + when cooled the tip of tube is broken off for escape ment of gas after which it is entirely broken + moulds taken out. Filaments then washed in benzol to dissolve the oil.

After this preliminary carborization fibers are to be run through the final heat in the ordinary way. Hot oil makes the filaments very pliable, if they are allowed to remain in benzol more than a minute will curl all up. Appear to be pretty well preliminarized.

J. Hoel Hamilton

Oct 14.

Hamilton's Exp. Variation No. 1

24 bamboo filaments put through same process as Exp. No. 1 + except that instead of bringing temperature up quickly, I gradually turned on more heat + took 8 hours to bring it up to 600° Fhr.

May 18.

Hamilton's Exp. No. 2 —

These set of 20 bamboo filaments, 5 in each carbon mould, sealed in glass tube containing pure glycerine. Temperature brought up quickly to 600° in one hour. When taken out the fibres were not carbonized but very rotten + fell apart all to pieces when put in water to dissolve the glycerine.

May 20"

Hamilton's Exp. No 3.—

Tube, in which this pet[ri]
20 filamento were contained
Sphere Paraffine, heat brought
up to 60° the one hour.
Fibres when taken out ap-
peared well preliminarized.

Mary Hamiltons Exp. Varia. No 3.

inf. salts ½ linseed oil ½ at 600° / from H. H" 4. May 2

Note Book.

Aug. 8. '87. A. E. B. Hamilton

Preparing Oiled Impregnating Paper for Armatures. — By first drying sheets in oven to drive off moisture then dipping them in Linseed Oil & afterwards drying them again with the oil oxidized on surface. —

the ordinary way.